

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A microscope for viewing samples stereoscopically or compoundly, said microscope comprising:

a stereo objective;

a compound objective;

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an objective housing, said objective housing holding said stereo objective and said compound objective, said objective housing enabled to swap said stereo objective with said compound objective or said compound objective with said stereo objective in a viewing path of the microscope;

a microscope body;

a light for providing brightfield illumination for use with both said stereo and compound objectives; and

a light for providing fluorescent illumination for use with both said stereo and compound objectives.

2. (Withdrawn) An optical microscope system that permits three optical viewing techniques, said system comprising: means for viewing samples in one of three dimensions, two dimensions, and macro with reflected light fluorescence and transmitted light brightfield; and

means for sorting said samples under stereo fluorescence illumination and for verifying detail of said samples under compound optic fluorescence illumination.

3. (Withdrawn) The optical system as defined by claim 2, wherein said means for viewing comprises one stereoscopic and two compound objectives.

4. (Withdrawn) The optical system as defined by claim 3, further comprising a transmitted light base for providing illumination for transmitted light brightfield for said stereo and compound objectives.

5. (Withdrawn) The optical system as defined by claim 2, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image created.

6. (Withdrawn) The optical system as defined by claim 3, further comprising a stereo microscope body that is shiftable about an axis in a position that is over the stereo objective or the compound objective.

7. (Previously presented) The microscope of claim 1 including:
a second compound objective; wherein
said objective housing is enabled to swap any of the stereo objective, the first compound objective, or the second compound objective in a viewing path of the microscope.

8. (Previously presented) The microscope of claim 1, wherein said objective housing swaps said objectives in an automated fashion.

9. (Previously presented) The microscope of claim 1, further including a prism mechanism capable of being positioned in an automated fashion in the path of a single-axis compound image for creating binocular images from said single-axis compound image.

10. (Withdrawn) An optical microscope system that permits three optical viewing techniques, said system comprising: means for viewing samples in one of three dimensions, two dimensions, and macro; further wherein

all three optical viewing techniques are capable of using either light for fluorescent illumination or light for brightfield illumination.

11. (Withdrawn) The optical system as defined by claim 10, wherein said means for viewing comprises one stereoscopic and two compound objectives.

12. (Withdrawn) The optical system as defined by claim 11, further comprising a transmitted light base for providing illumination for transmitted light brightfield for said stereo and compound objectives.

13. (Withdrawn) The optical system as defined by claim 10, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image.

14. (Withdrawn) The optical system as defined by claim 11, further comprising a stereo microscope body that is shiftable about an axis in a position that is over the stereo objective or the compound objectives.

15. (Withdrawn) An optical microscope system that permits at least two optical viewing techniques, said optical viewing techniques comprising: means for viewing samples in three dimensions and means for viewing samples in two dimensions;

wherein both at least two optical viewing techniques are capable of using either light for fluorescent illumination or light for brightfield illumination.

16. (Withdrawn) The optical system as defined by claim 15, wherein said means for viewing in three dimensions comprises one stereoscopic objective and said means for viewing in two dimensions comprises at least one compound objective.

17. (Withdrawn) The optical system as defined by claim 16, further comprising a transmitted light base for providing said illumination for transmitted light brightfield for said stereo and compound objectives.

18. (Withdrawn) The optical system as defined by claim 15, further comprising means, disposed in an optical path of the system, for creating binocular images from a single axis compound image.

19. (Withdrawn) The optical system as defined by claim 16, further comprising a stereo microscope body that is shiftable about an axis in a position that is over said stereo objective or said at least one compound objective.

20. (Previously presented) The microscope of claim 7, wherein said objective housing swaps said objectives in an automated fashion.